II. CLAIM AMENDMENTS

1 – 45. (Cancelled)

46. (New)   A method of suppressing noise in a desired signal accompanied by noise, the method comprising:

determining a first term representing a summation of an estimated periodogram of the desired signal and a predetermined fraction of an estimated periodogram of the accompanying noise;

determining a second term representing a summation of an estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise; and

generating a noise reducing filter operative on the basis of a ratio of the first term divided by the second term.

47. (New) The method according to claim 46 further comprising that the first term is a summation of an estimated periodogram of the desired signal and a predetermined fraction of an estimated periodogram of the accompanying noise divided by the noise power spectral density.

48. (New) The method according to claim 46 further comprising that a level of the noise included in the estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise is variable so as to include a desired amount of noise in a resulting noise suppressed signal.

49. (New) The method according to claim 48 further comprising that the level of the noise in the estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise provides an acceptable level of context information.

50. (New) The method according to claim 46 further comprising that the level of the estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise is below a mask limit of the speech and is not audible to a listener.

51. (New) A method of suppressing noise in a desired signal accompanied by noise, the method comprising:

determining a first term representing a summation of an estimated periodogram of the desired signal and a predetermined fraction of an estimated power spectral density of the accompanying noise;

determining a second term representing a summation of an estimated periodogram of the desired signal plus the estimated power spectral density of the accompanying noise; and

generating a noise reducing filter operative on the basis of a ratio of the first term divided by the second term.

52. (New) The method according to claim 51 further comprising that the first term is a summation of an estimated periodogram of the desired signal and a predetermined

fraction of an estimated periodogram of the accompanying noise divided by the noise power spectral density.

53. (New) The method according to claim 51 further comprising that a level of the noise included in the estimated periodogram of the desired and a predetermined fraction of an estimated power spectral density of the accompanying noise is variable so as to include a desired amount of noise in a resulting noise suppressed signal.

54. (New) The method according to claim 53 in which the level of the noise in the estimated periodogram of the desired signal and a predetermined fraction of an estimated power spectral density of the accompanying noise provides an acceptable level of context information.

55. (New) The method according to claim 51 further comprising that a level of the estimated periodogram of the desired signal and a predetermined fraction of an estimated power spectral density of the accompanying noise is below a mask limit of the speech and is not audible to a listener.

56. (New) An apparatus comprising:

a noise suppressor configured to suppress noise in a signal accompanied by noise, the noise suppressor comprising:

a noise estimator configured to determine a first term representing a summation of an estimated periodogram of the desired signal and a predetermined fraction of an estimated periodogram of the accompanying noise;

a noise estimator configured to determine a second term representing a summation of an estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise; and

a noise reducing filter generator configured to generate a noise reducing filter operative on the basis of a ratio of the first term divided by the second term.

57. (New) The apparatus of claim 56 further comprising that the first term is a summation of an estimated periodogram of the desired signal and a predetermined fraction of an estimated periodogram of the accompanying noise divided by the noise power spectral density.

58. (New) The apparatus according to claim 56 further comprising that a level of the noise included in the estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise is variable so as to include a desired amount of noise in a resulting noise suppressed signal.

59. (New) The apparatus according to claim 58 further comprising that the level of the noise in the estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise provides an acceptable level of context information.

60. (New) The apparatus according to claim 56 further comprising that the level of the estimated periodogram of the desired signal plus an estimated power spectral density of the accompanying noise is below a mask limit of the speech and is not audible to a listener.

61. (New) An apparatus comprising:

a noise suppressor configured to suppress noise in a desired signal accompanied by noise, the noise suppressor comprising:

a noise estimator configured to determine a first term representing a summation of an estimated periodogram of the desired signal and a predetermined fraction of an estimated power spectral density of the accompanying noise;

a noise estimator configured to determine a second term representing a summation of an estimated periodogram of the desired signal plus the estimated power spectral density of the accompanying noise; and

a noise reducing filter generator configured to generate a noise reducing filter operative on the basis of a ratio of the first term divided by the second term.

62. (New) The apparatus according to claim 61 further comprising that the first term is a summation of an estimated periodogram of the desired signal and a predetermined fraction of an estimated periodogram of the accompanying noise divided by the noise power spectral density.

63. (New) The apparatus according to claim 61 further comprising that a level of the noise included in the estimated periodogram of the desired and a predetermined fraction of an estimated power spectral density of the accompanying noise is variable so as to include a desired amount of noise in a resulting noise suppressed signal.

64. (New) The apparatus according to claim 63 in which the level of the noise in the estimated periodogram of the desired signal and a predetermined fraction of an

estimated power spectral density of the accompanying noise provides an acceptable level of context information.

65. (New) The apparatus according to claim 61 further comprising that a level of the estimated periodogram of the desired signal and a predetermined fraction of an estimated power spectral density of the accompanying noise is below a mask limit of the speech and is not audible to a listener.